

October 13, 1988

TO: Minerals File

FROM: Wayne Hedberg, Reclamation Hydrologist *DWH*

RE: Mine Site Inspection, Drum Mine, M/027/007, Millard County, Utah, and Alto/Ibex Mine, M/023/013, Juab County, Utah

Wayne Hedberg performed a field inspection at the Drum Mine which has recently been purchased by Jumbo Mining Corporation. The intent of the field visit was to get an overview of the current status of operations at the Drum Mine and to inspect the proposed mining locations for Jumbo Mining Company's new Alto/Ibex Project.

Mr. Toby Manzanares of the BLM House Range Resource Area office accompanied the State on the inspection. We met with Mr. David Hartshorn, geologist, and Mr. E. B. King, president of Jumbo Mining Company at the Drum Mine. Mr. Hartshorn accompanied us on the mine site inspections.

The first stop was at the proposed Mizpah Pit. This particular site disturbance will be approximately 18 acres. At this point in time, it hasn't been included as part of the proposed Alto/Ibex Project development. This pit will be an amendment to the NOI in the near future.

The next site visited was the planned location for the Alto Pit. This pit and waste dumps will disturb 3.5 to 4 acres and will be approximately 100 to 150 feet deep when completed. A small pit called the Keystone Test Pit is located approximately 400 yards west of the proposed Alto Pit. An estimated 15,000 tons of ore will be removed from this test pit.

The fourth site visited was the proposed location for the underground Ibex decline. There are existing underground shafts, tunnels and stopes at this location. These tunnels and shafts have been abandoned and inactive for 30 to 40 years. The Ibex underground mine location is approximately 1/2 mile northwest of the Keystone Pit location.

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The Monarch Test Pit was not inspected while on site. This pit is located approximately 1 mile west of the Ibex decline. The operator stated that this pit would not have any significant upgrade of the roads accessing the site. Jumbo is planning to extract 10,000 to 15,000 tons of ore from the pit. The results of the processing of this ore test will determine whether further development of this ore deposit will proceed.

The entire area, in and around the Drum Mine has been historically mined and explored to a great extent. Western States Minerals, the previous owners of the Drum Mine, have done extensive exploration in the area. A number of exploration roads exist and many drill holes are still open at the surface, particularly in the areas proposed for the new pits and underground mines. Mr. Hartshorn indicated, that to his knowledge, Western States Minerals had not conducted any exploration in this area since 1987.

The new surface disturbance planned by Jumbo Mining Company has been estimated to total approximately 12 acres. A series of upgrades of existing access roads will be performed as part of these new developments. A new haulage road will traverse two sections of BLM managed land. The new haul/access road will also cross two small sections of state land. The proposed location of the waste dump for the Alto Pit may also impact a small portion of state land in Section 36, T14S, R11W. The remainder of the site disturbances will be located on patented privately held land which is owned and/or subleased by Jumbo Mining Company.

Jumbo Mining Company has apparently not pursued the necessary permits from the BLM or the State Department of Health at this point in time for their new operations. Mr. Hartshorn assured Mr. Manzanares that he would be filing the proper paper work with the BLM in the very near future.

After completing our inspections of the proposed mine sites, we returned to the Drum Mine. The Notice of Intention which Jumbo submitted for the new mine site disturbances also included language informing the Division of their intentions to open a new underground mine shaft in one of the existing Drum Mine pits. Jumbo Mining Company also intends to expand development of the ore deposits located in the North Ridge Pit. We requested that Mr. Hartshorn show us the locations for the proposed pit expansion and new underground development. Photographs were taken of all the sites visited.

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After our site inspection we met with Mr. King and Mr. Hartshorn at the mine office and discussed the draft review document which I had brought along to give to the mine operator. I informed Mr. King that the document was only a draft and that as a result of my site inspection some of the comments might change. I also indicated that there would probably be some additional comments forthcoming pending completion of the review by the rest of the permitting team. I informed Mr. King that I hoped to have the final review document in the mail to him no later than October 21, 1988.

I discussed our recommendation to permit the new proposed mine development as a revision to the existing permit for the Drum Mine rather than as a separate Notice of Intention which we had received. I discussed, with Mr. King, the advantages to pursuing this option and he agreed to abide by this recommendation. I told him I would forward a copy of a NOI revision form to him with the transmittal of the final review document. I also gave Mr. King a copy of our latest proposed minerals rules, as the draft technical review document references these rules.

I questioned Mr. King regarding the status of their permitting with the Department of State Health. He indicated that they had responded to the Department's Cessation Order brought about by noncompliance with the approved permit while Western States Minerals was operating the mine site. Apparently due to a gross oversight, Western States Minerals neglected to follow through with the permitting paper work when they added a series of new heap leach pads to the mining operation.

Mr. King indicated that, to his knowledge, they would likely begin operations with an approval from State Health on the permitted heap leach pads within a month. He also indicated that they would be providing some additional information to the Health Department regarding the design and construction of the additional unpermitted heap leach pads. I asked Mr. King if Jumbo Mining Company had provided State Health with any permitting information regarding their new proposed developments at the Alto and Ibex Mine sites. He informed me that he had given a copy of the same NOI application that we had received, to the Health Department in July 1988.

On October 12, 1988, I discussed this project briefly with Mr. Charlie Dietz of the Bureau of Water Pollution Control. He informed me that they had not received or reviewed a Notice of Intention for the above mentioned proposal. Mr. Dietz indicated that they had been working on Jumbo's response to the Cessation Order, but he was not knowledgeable of any new applications for the new Drum Mountain Project.

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I informed Mr. King that I would sit down with Mr. Hartshorn, or himself, to go over the Division's Mining Reclamation plan for the Drum Mine and help them copy any portions of the plan which they may need. Mr. King informed me that Western States Mining Company would be sending Jumbo Mining Company a complete set of their permitting records, in the near future, as part of the sales agreement. I also informed Mr. King that I would look at the existing Drum Mine permit to better understand how easily this permit may be modified or revised. We discussed the status of the permit transfer between Western States Minerals and Jumbo Mining Company while on site.

Mr. King indicated that he was experiencing some difficulty in obtaining a reclamation bond for the mine site. He expressed some frustration in that he had contacted 20 surety companies with very little success in obtaining a reclamation surety. He indicated that it may become necessary for Jumbo to post cash as the form of reclamation bond. I indicated to Mr. King that the Division would prefer to have one reclamation bond for the entire series of mine disturbances. Therefore, the existing reclamation bond of \$264,000 will need to be amended to incorporate the new Drum Mountain Project site disturbances.

Mr. Manzanares also informed Mr. King that Jumbo Mining Company would also have to notify the Bureau of Land Management formally of the recent change in ownership so that the BLM could formally approve of the property exchange.

Mr. King indicated that he would suspend finalizing the acquisition of reclamation surety until the Division provides them with a cost estimate reclamation for the new mine site disturbances. I informed Mr. King that it is our intention to get a new reclamation cost estimate to him as soon as possible.

I also indicated to Mr. King that when we previously met in the Division offices with Mr. Hartshorn back in July 1988, that we probably would need a separate amendment request to permit expanded operations at the Drum Mine. Mr. King asked if they could recommence operations at the Drum Mine prior to submitting a separate amendment request, if required by the Division. I told Mr. King that I would check our files and the permitting documentation for the Drum Mine and get back to him with an answer to his question as soon as possible. He did indicate that the proposed development was all within the permitted area for the Drum Mine. However, the proposed underground development was not part of the original application.

jb

cc: E.B. King, Jumbo Mining Company
Toby Manzanares, BLM, House Range RA
Charlie Dietz, BWPC
Jerry Mansfield, State Lands
L.P. Braxton
Scott Johnson

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